

AMENDMENTS TO THE CLAIMS

1. (Currently Amended) A method of driving a liquid crystal display, comprising:
dividing input data into most significant bit data and least significant bit data;
delaying the most significant bit data for one frame period; and
generating modulated ~~modulating~~ the current most significant bit data in accordance with
a difference between the delayed most significant bit data and the current most significant bit
data and independently from the least significant bit data,
wherein the modulated current most significant bit data contains more data bits than do
each of the current most significant bit data and the delayed most significant bit data.
2. (Currently Amended) The method according to claim ~~[[14]]~~ 1, wherein the current
and delayed most significant bit data and the least significant bit data are each 4 bits wide, and
the input data and the modulated current most significant bit data are each 8 bits wide.
3. (Previously Presented) The method according to claim 1, further comprising:
combining the current least significant bit data and the modulated current most significant
bit data to generate an output video data.
4. (Currently Amended) The method according to claim 1, wherein the generating
modulated ~~modulating~~ of the current most significant bit data comprises,
selecting desirable data from a look-up table based on the current most significant bit data
and the delayed most significant bit data; and
outputting the selected data as the modulated current most significant bit data.
5. (Currently Amended) A driving apparatus for a liquid crystal display, comprising:
a memory to receive ~~receiving~~ most significant bits of data for an n^{th} frame from an input
line and to output ~~outputting~~ the most significant bits of data for an $(n-1)^{\text{th}}$ frame; and
a modulator to modulate ~~modulating~~ the most significant bits of data of data including
most significant bits of data and least significant bits of data of the n^{th} frame in accordance with a
difference between the most significant bits of data for the $(n-1)^{\text{th}}$ frame and the most significant
bits of data for the n^{th} frame and independently of the least significant bits of data,

wherein the modulated most significant bits of data contain more data bits than do each of the most significant bits data and the $(n-1)^{\text{th}}$ frame and the most significant bits of data for the n^{th} frame.

6. (Currently Amended) The apparatus according to claim ~~[[17]]~~ 5, wherein the most significant bits of data and least significant bits of data from the input line are each 4 bits wide, and the input data and the modulated most significant bits of data are each 8 bits wide.

7. (Previously Presented) The apparatus according to claim 5, wherein the modulator includes a look-up table having available gray level values for the modulated most significant bits of data.

8. (Currently Amended) The apparatus according to claim 5, further comprising:
a liquid crystal display panel having a plurality of data lines and a plurality of gate lines;
a data driver ~~to combine combining~~ the modulated most significant bits of data from the modulator and the least significant bits of data bypassed from the input line to generate a modulated video data, and ~~to supply supplying~~ the modulated video data to the data lines;
a gate driver to supply supplying the scanning signals to the gate lines; and
a timing controller ~~to supply supplying~~ video data to the input line and ~~to concurrently control controlling~~ the data driving and the gate driver.

9. (Currently Amended) A liquid crystal display comprising:
a liquid crystal display panel having a plurality of data lines and a plurality of gate lines thereon;
a timing controller ~~to rearrange rearranging~~ video data received from an input data and outputting RGB data including most significant bits of the RGB data and least significant bits of the RGB data and first and second timing signals;
a data modulator ~~modulating to modulate the~~ most significant bits of the RGB data based on a look-up table storing modulated most significant bits of the RGB data, wherein the modulated most significant bits of the RGB data contain more data bits than do the most significant bits of the RGB data and wherein the least significant bits of the RGB data bypass the modulator;

a data driver to receive ~~receiving~~ the first timing signal, and to combine ~~combining~~ the modulated most significant bits of the RGB data and the least significant bits of the RGB data, which bypassed the data modulator, to generate a modulated video data, the data driver supplying the modulated video data to the liquid crystal display panel through the data lines; and
a gate driver to receive ~~receiving~~ the second timing signal and to supply ~~supplying~~ a scanning signal to the liquid crystal display panel through the gate lines.

10. (Previously Presented) The liquid crystal display according to claim 9, wherein the data modulator includes;

a frame memory delaying current most significant bits of the RGB data for one frame period and outputting the delayed most significant bits of the RGB data, and

a look-up table receiving both the current most significant bits of the RGB data and the delayed most significant bits of the RGB data and outputting the modulated most significant bits of the RGB data.

11. (Currently Amended) The liquid crystal display according to claim ~~[[19]]~~ 2, wherein the most significant bits of the RGB data and the least significant bits of the RGB data are each 4 bits wide, and the RGB data and the modulated most significant bits of the RGB data are each 8 bits wide.

12. (Canceled)

13. (Canceled)

14. (Canceled)

15. (Previously Presented) The method according to claim 3, wherein the liquid crystal display comprises a liquid crystal display panel having a plurality of data lines, the method further comprising:

driving the data lines with the output video data.

16. (Previously Presented) The method according to claim 4, wherein the look-up table stores available gray level values of the modulated current most significant bit data based on the available gray level values of the current most significant bit data and the available gray level values of the delayed most significant bit data.

17. (Canceled)

18. (Previously Presented) The apparatus according to claim 7, wherein the look-up table stores available gray level values of the modulated most significant bits of data based on the available gray level values of the most significant bits of data for the $(n-1)^{\text{th}}$ frame and the available gray level values of the most significant bits of data for the n^{th} frame.

19. (Canceled)

20. (Previously Presented) The apparatus according to claim 10, wherein the look-up table stores available gray level values of the modulated most significant bits of the RGB data based on the available gray level values of the current most significant bits of the RGB data and the available gray level values of the delayed most significant bits of the RGB data.